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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,511	11/13/2003	Takayuki Yajima	848075/0060	8914

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EXAMINER	
DEAN, RAYMOND S	
ART UNIT	PAPER NUMBER
2618	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/712,511	YAJIMA, TAKAYUKI	
	Examiner	Art Unit	
	Raymond S. Dean	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 May 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *0204,0606*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 2, 4 – 5, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Mizuta et al. (US 2003/0064758).

Regarding Claim 1, Mizuta teaches a portable radiotelephone comprising: a first housing having at least a display section and a speaker section (Figure 4A, Section 0078); a second housing having at least a main operation section and a microphone (Figure 4A, Section 0076); wherein both of said housings are openably and closably coupled together so that said main operation section is covered with said first housing in a closed state and is exposed outside in an opened state (Figures 9B – 9D), and said display section and said speaker section are exposed outside in both of the closed state and the opened state (Figures 9B – 9D), a communication control section for enabling a communication in the closed state, and enabling the communication to be continued even after both of said housings are brought into the opened state from the

closed state while the communication is in progress (Sections 0035, 0037, Sections 0141 – 0142, the portable telephone can communicate in the open or closed mode, in the closed mode the secondary operation keys (207) are used to communicate, the display controller will arrange the contents for display depending on the mode thereby enabling the communication to remain in progress).

Regarding Claim 2, Mizuta teaches all of the claimed limitations recited in Claim 1. Mizuta further teaches at least one auxiliary operation section provided on other surface of said first and second housings than surfaces where said first and second housings are opposed each other in the closed state (Sections 0035, 0037), wherein said communication control section controls to connect a communication line when an incoming call is received and then said auxiliary operation section is operated in the closed state (Section 0142).

Regarding Claim 4, Mizuta teaches all of the claimed limitations recited in Claim 1. Mizuta further teaches wherein said communication control section controls said portable radiotelephone to disconnect the communication once the portable radiotelephone is brought into the closed state again while the communication is in progress in the opened state (Sections 0131, 0134).

Regarding Claim 5, Mizuta teaches all of the claimed limitations recited in Claim 1. Mizuta further teaches an opened/closed state detecting section for detecting the opened/closed state of said first housing and said second housing (Section 0095 lines 3 – 5).

Regarding Claim 8, Mizuta teaches all of the claimed limitations recited in Claim 1. Mizuta further teaches wherein said first housing and said second housing are coupled each other so as to be opened and closed by sliding motion (Section 0112 lines 6 – 8).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3, 6, 9 – 11, 13 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuta et al. (US 2003/0064758) in view of Kim (US 6,993,366).

Regarding Claim 3, Mizuta teaches all of the claimed limitations recited in Claim 2. Mizuta further teaches wherein said speaker section has a first speaker arranged on a surface provided with said display section of said first housing interposing said display section (Figure 4A, Section 0078), said first housing and said second housing are coupled each other to be rotated around a shaft which is provided in a direction of passing through the first and second housings (Figures 9B – 9D, Section 0075 lines 3 – 7, the biaxial hinge is the shaft), once the communication line is connected in the closed state, said communication control section controls said first speaker which is arranged furthest from said microphone to function as a receiver (Figure 9D, Section

0142, the speaker (203) is enabled), and said portable radiotelephone is brought into the opened state from the closed state while the communication is in progress (Sections 0141 – 0142, the portable telephone can communicate in the open or closed mode, the display controller will arrange the contents for display depending on the mode thereby enabling the communication to remain in progress).

Mizuta does not teach a second speaker, controlling said second speaker not to function, and once said portable radiotelephone is brought into the opened state from the closed state while the communication is in progress, and said communication control section controls said second speaker to function as a receiver, but controls said first speaker not to function.

Kim teaches a portable phone comprising a first and second speaker (Col. 2 lines 62 – 66), controlling said second speaker not to function (Col. 4 lines 10 – 16), and once said portable radiotelephone is brought into a second state from a first state and said communication control section controls said second speaker to function as a receiver, but controls said first speaker not to function (Col. 4 lines 10 – 16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the portable phone of Mizuta with the speaker/microphone configuration of Kim for the purpose of allowing a user to hold a smooth conversation regardless of the direction in which said user is holding said portable phone as taught by Kim.

Regarding Claim 9, Mizuta teaches a portable radiotelephone comprising a second housing having a main operation section (Figure 4A, Section 0076), a first

housing to be overlapped on said second housing so as to cover said main operation section (Figures 4A, 9D, Section 0078), and a coupling section which couples respective one ends of said first and second housings in such a manner that said first and second housings are relatively rotated around a shaft extending in a direction of overlapping (Figures 9B – 9D, Section 0075 lines 3 – 7, the biaxial hinge is the shaft), in which said portable radiotelephone is designed so as to be shifted between a closed state which said first and second housings are overlapped and an opened state which said first or second housing is rotated by 180 degree from this closed state (Figures 9B and 9D), a microphone is provided on the other end of said second housing (Figure 9B, microphone (103)), a first speaker is provided at one end of said first housing which is directed in same direction with a face thereof provided with said main operation section (Figure 9B), and a communication control section controls communication to perform in either said closed state and said opened state, and controls communication to be continued even after the portable radiotelephone is brought into the opened state from the closed state while the communication is in progress (Sections 0035, 0037, Sections 0141 – 0142, the portable telephone can communicate in the open or closed mode, in the closed mode the secondary operation keys (207) are used to communicate, the display controller will arrange the contents for display depending on the mode thereby enabling the communication to remain in progress).

Mizuta does not teach a second speaker is provided at the other end of said first housing.

Kim teaches a first speaker provided at one end of a housing and a second speaker provided at another end of said housing (Figure 1, Col. 2 lines 62 – 66).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the portable phone of Mizuta with the speaker/microphone configuration of Kim for the purpose of allowing a user to hold a smooth conversation regardless of the direction in which said user is holding said portable phone as taught by Kim.

Regarding Claims 6, 11, Mizuta in view of Kim teaches all of the claimed limitations recited in Claims 3, 9. Kim further teaches wherein said first and second speakers sound an incoming call sound when an incoming call is received (Col. 4 lines 17 – 24, first and second speakers are enabled thus said speakers will sound an incoming call sound when there is an incoming call).

Regarding Claim 10, Mizuta in view of Kim teaches all of the claimed limitations recited in Claim 9. Mizuta further teaches wherein the communication is performed by means of said first speaker and said microphone in the closed state (Figure 9D, Section 0142), and the communication is performed by means of said speaker and said microphone in the opened state (Figure 9B, Section 0131). Kim further teaches a second speaker (Col. 2 lines 62 – 66).

Regarding Claim 13, Mizuta in view of Kim teaches all of the claimed limitations recited in Claim 9. Mizuta further teaches a communication control section for controlling functions of said first speaker and said microphone (Section 0094 line 4, the control unit (109) controls the phone functions); and at least one auxiliary operation

section provided on other surface of said first and second housings than surfaces where said first and second housings are opposed each other in the closed state (Sections 0035, 0037), wherein said communication control section controls to connect a communication line when an incoming call is received and then said auxiliary operation section is operated in the closed state (Section 0142). Kim further teaches a second speaker (Col. 2 lines 62 – 66).

Regarding Claim 14, Mizuta in view of Kim teaches all of the claimed limitations recited in Claim 9. Mizuta further teaches wherein said communication control section controls said portable radiotelephone to disconnect the communication once the portable radiotelephone is brought into the closed state again while the communication is in progress in the opened state (Sections 0131, 0134).

5. Claims 7, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuta et al. (US 2003/0064758) in view of Kim (US 6,993,366), as applied to Claims 6, 11 above, and further in view of Masamura (US 6,819,939).

Regarding Claims 7, 12, Mizuta in view of Kim teaches all of the claimed limitations recited in Claims 6, 11. Mizuta in view of Kim does not teach wherein each of said first and second speakers independently sounds when an incoming call is received, to make stereo effects.

Masamura teaches first and second speakers that independently produce sound to make stereo effects (Col. 2 lines 29 – 32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the portable phone of Mizuta in view of Kim with the stereo speaker configuration of Masamura for the purpose of creating a portable phone that realizes stereophonic sound reproduction without impairing the suitability of said phone thus creating a more versatile phone.

6. Claim 15 isrejected under 35 U.S.C. 103(a) as being unpatentable over Mizuta et al. (US 2003/0064758) in view of Kim (US 6,993,366), as applied to Claim 9 above, and further in view of Babasaki et al. (US 2002/0198017).

Regarding Claim 15, Mizuta in view of Kim teaches all of the claimed limitations recited in Claim 9. Mizuta in view of Kim does not teach a gain adjusting section for adjusting sensitivity of said microphone, wherein said communication control section controls said gain adjusting section to increase gain of said microphone during the communication in the closed state to be higher than gain of said microphone during the communication in the opened state.

Babasaki teaches a teach a gain adjusting section for adjusting sensitivity of a microphone, wherein said communication control section controls said gain adjusting section to increase gain of said microphone during the communication in a first state to be higher than gain of said microphone during the communication in a second state (Section 0048 lines 7 – 13, one state is the very soft mode and another state is the very loud mode).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the portable phone of Mizuta in view of Kim with the gain

adjusting circuitry of Babasaki for the purpose of enabling a user to effectively communicate on the phone in an environment in which said user must speak softly so as not to disturb people nearby as taught by Babasaki.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S. Dean whose telephone number is 571-272-7877. The examiner can normally be reached on Monday-Friday 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Raymond S. Dean
February 13, 2007

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